

What is claimed is:

1. 1. An apparatus for recording and reproducing digital data, comprising:
 2. receiving means for receiving first compressed data composed of a plurality of packets, said first compressed data including a plurality of programs multiplexed in a time division manner;
 5. data separating means for extracting specific compressed audio/video data corresponding to a desired program from the first compressed data received by the receiving means;
 7. record control means for generating second compressed data including the compressed audio/video data extracted by the data separating means;
 8. recording means for recording the second compressed data generated by the record control means;
 1. data reproducing means for decoding the compressed audio/video data included in the second compressed data; and
 - time division control means for controlling the transmitting and reading of the second compressed data to and from the recording means in a time division manner.

1. 2. The apparatus according to claim 1, wherein said first compressed data is MPEG2-TS data and said second compressed data is MPEG2-PES data.
1. 3. The apparatus according to claim 2, wherein a plurality of said MPEG2-PES data is recorded by the recording means as one stream of data.

- 1 4. The apparatus according to claim 3, further comprising reproduction control means for
2 reading the second compressed data from the recording means and transmitting the second
3 compressed data to the data reproducing means.
- 1 5. The apparatus according to claim 4, further comprising monitoring means for monitoring
2 the amount of data transmitted from the reproduction control means to the data reproducing
3 means.
- 1 6. The apparatus according to claim 5, further comprising selecting means for selectively
2 transmitting the compressed audio/video data extracted by the data separating means to the
3 data reproducing means.
- 1 7. The apparatus according to claim 6, further comprising video data decoding section and
2 audio data decoding section for decoding the compressed video data and compressed audio
3 data, respectively, in the data reproducing means.
- 1 8. The apparatus according to claim 7, wherein said recording means is a hard disk.
- 1 9. A method for recording and reproducing digital data, comprising the steps of:
2 receiving first compressed data, said first compressed data including a plurality of programs
3 multiplexed in a time division manner;
4 extracting specific compressed audio/video data corresponding to a desired program from
5 the first compressed data;

6 generating second compressed data including the compressed audio/video data extracted in
7 the extracting step;

8 recording the second compressed data in recording means;

9 reading the second compressed data from the recording means, and subsequently decoding
10 and reproducing the second compressed data by data reproducing means; and

11 controlling the transmitting and reading of the second compressed data to and from the
12 recording means in a time division manner.

- 10. The method according to claim 9, wherein said first compressed data is MPEG2-TS data
and said second compressed data is MPEG2-PES data.
- 11. The method according to claim 10, wherein a plurality of said MPEG2-PES data is recorded
by the recording means as one stream of data.
- 12. The method according to claim 11, wherein a plurality of said MPEG2-PES data is recorded
as one stream of data in the order in which the compressed audio/video data is received by
the receiving means.
- 13. The method according to claim 12, further comprising the step of selectively transmitting
the compressed audio/video data extracted in the extracting step to the data reproducing
means.
- 14. The method according to claim 13, further comprising the step of monitoring the amount of
said second compressed data decoded and reproduced by data reproducing means.

- 1 15. An apparatus for recording and reproducing digital data, comprising:
- 2 a receiver for receiving first compressed data composed of MPEG2-TS data, said first
- 3 compressed data including a plurality of programs multiplexed in a time division manner;
- 4 a filter for extracting specific compressed audio/video data corresponding to a desired
- 5 program from the first compressed data received by the receiver;
- 6 a data unloader for generating second compressed data composed of MPEG2-PES data,
- 7 including the compressed audio/video data extracted by the filter;
- 8 a recorder for recording the second compressed data generated by the data unloader;
- 9 a decoder for decoding the compressed audio/video data included in the second compressed
- 10 data; and
- 11 a time division controller for controlling the transmitting and reading of the second
- 12 compressed data to and from the recorder in a time division manner.
- 13 16. The apparatus according to claim 15, wherein a plurality of said MPEG2-PES data is
- 14 recorded by the recorder as one stream of data.
- 15 17. The apparatus according to claim 16, further comprising reproduction control means for
- 16 reading the second compressed data from the recorder and transmitting the second
- 17 compressed data to the decoder.
18. The apparatus according to claim 17, further comprising monitoring means for monitoring
- 19 the amount of data transmitted from the reproduction control means to the decoder.

1 20. The apparatus according to claim 15, wherein said recorder is a hard disk.